About 50 ninth-grade girls visited INL recently to learn about careers in science and technology. The day's activities included working in hot cells by performing basic tasks with manipulators.

Beyond origami: Girls glimpse amazing futures in science and technology

by Rebecca Jones, *INL Communications & Public Affairs*

The back of the Idaho National Laboratory bus was no different than what you would expect on any field trip with ninth-grade girls. Some chatted in small groups, some listened to their iPods and one group of students manipulated an elaborately folded piece of paper to amuse themselves with the futures it supposedly foretold.

Jana Pfeiffer, a Technician for Nuclear Fuels and Materials Characterization, demonstrates how little dexterity you can have in a hot box while using gloves identical to the display sample.

But these young women knew they didn't have to rely on a piece of origami made by their school friends to find out what their futures will be. They were on their way to INL's Materials and Fuels Complex for My Amazing Future, an all-day lineup of speakers and workshops designed to show girls career options available at INL and to get them excited about science and technology.

Approximately 50 youths ages 13-17 attended the March event, half from Idaho Falls School District 91 and half from Twin Falls through the College of Southern Idaho's Girls in Technology Program. The event was sponsored by many local organizations, including Idaho-Women in Nuclear, Battelle Energy Alliance, CH2M WG, Walsh Engineering Services, Partners for Prosperity, ESTEC, Idaho Falls School District 91 and College of Southern Idaho's Girls in Technology.

"My Amazing Future is an opportunity to have the young women out here as part of the next generation of contributors. They will need to put science, engineering and technology to work to solve real problems for real people," said event organizer Maureen Finnerty. "We hope that this will allow them to expand their horizons to make their futures truly awesome."

And while developing an amazing future was the focus of the event, the participants were advised that such opportunities are only possible to those who work to make it happen. Keynote speaker DaNel Huggins, a Kuna High School physics teacher, advised the group that now is the time to begin. Huggins encouraged them to start setting their sights high, gathering material for college applications, seeking opportunities for growth and rigorously searching for scholarships.

The girls also learned that their contributions in the work force will be needed more than ever. Although 49 percent of the work force is made up of women, only 12 percent of the science and technology work force is female. The increasing age of baby boomers will require female scientists to take on more responsibility at a younger age.

The statistics were startling and the speakers engaging, but the workshops let the visitors get hands-on with potential future careers. The girls met women working in science and technology at INL. Chemists, engineers, industrial hygienists and technicians took them through daily activities on their jobs. Then they let the group see what a job in science and technology is like.

After learning about space battery assembly at INL, two My Amazing Future participants tried their hand at creating basic models.

They tried their hands at using manipulators and experienced the challenges of working in a hot cell. They learned about chemical reactions that make glow sticks and the chemical properties that perform basic forensic analysis. They analyzed the toxicity of household chemicals. They assembled a mockup space battery similar to one that has been prepared for an upcoming NASA mission.

"When I first got here, I knew I wanted to do something with math and science in my career. I was thinking about being a doctor," one young participant explained. "But after going to the workshops, I can't make up my mind. First, I wanted to be a chemist, then I wanted to be an engineer, and after visiting the space battery, now I want to be an astronaut, too!"

The girls' enthusiasm was palpable on the bus ride home. They had stopped speculation over a fate foretold by an origami game and were excited

about their potential, discussing the great unknown of their careers. At the end of the day, they were all looking forward to amazing futures.

View the video of the day's events on YouTube.

Feature Archive